



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,392	02/27/2004	Michael D. Smith	418268003US	4945
45979	7590	04/29/2010	EXAMINER	
PERKINS COIE LLP/MSFT P. O. BOX 1247 SEATTLE, WA 98111-1247				KUCAB, JAMIE R
ART UNIT		PAPER NUMBER		
3621				
NOTIFICATION DATE			DELIVERY MODE	
04/29/2010			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[patentprocurement@perkinscoie.com](mailto:patentprocurement@perkinscoie.com)

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/789,392	SMITH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	JAMIE KUCAB	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 January 2010.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3,6-21 and 36 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-3, 6-21, and 36 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|  | 6) <input type="checkbox"/> Other: _____ .                        |

**DETAILED ACTION**

***Acknowledgements***

1. Applicant's response filed January 15, 2010 is acknowledged.
2. Claims 1-3, 6-21, and 36 are pending in the application.
3. Claims 1-3, 6-21, and 36 are examined below.
4. This Office action is given Paper No. 20100423 for reference purposes only.

***Claim Rejections - 35 USC § 112, First Paragraph***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-3 and 6-13 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The following limitations were not previously disclosed: "wherein the service intermediary verifies that the start code can be generated from the end code" (claim 1).

***Claim Rejections - 35 USC § 112, Second Paragraph***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 1-3, 6-13, and 36 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention.

9. Regarding claim 1, Applicant's recitation "wherein the service intermediary verifies that the start code can be generated from the end code" would have been unclear to a person having ordinary skill in the art at the time of the invention. In light of Applicant's specification, it is unclear how the start code could be generated from the end code. For the purpose of comparison with the prior art, the Examiner is interpreting "wherein the service intermediary verifies that the start code can be generated from the end code" to be -- wherein the service intermediary verifies that the ~~startend~~ code can be generated from the ~~startend~~ code --.

10. Regarding claim 36, it is unclear whether various limitations in this claim invoke 35 U.S.C. 112, sixth paragraph. Applicant recites various computers modified by functional language. Because "means for" is not recited and in accordance with MPEP 2181 I., it is the Examiner's principle position that the claims do not invoke 35 U.S.C. 112, 6<sup>th</sup> paragraph. Based on this interpretation, it is the Examiner's further position that any three general purpose networked computers (such as any of those described in the prior art cited in the below §103 rejection) are capable of performing the recited functions and therefore read on the claim. However, it appears to be Applicant's intent

that these functional recitations require more than general purpose networked computers. Because of this, it is recommended that Applicant do one of the following:

- (a) Clearly invoke 35 U.S.C. 112, sixth paragraph by amending the claim to include the phrase "means for" or "step for" in accordance with the three prong analysis set forth in MPEP 2181 I.;
- (b) Clearly not invoke 35 U.S.C. 112, sixth paragraph by amending the claim to recite that each of the computers is programmed to perform method steps corresponding to the aforementioned functional recitations (e.g., -- the service consumer computer ~~for receiving~~ programmed to receive from the service provider -- or similar). Such an amendment would render claim 36 allowable over the prior art;
- (c) Expressly state on the record that the claims do not invoke 35 U.S.C. 112, 6<sup>th</sup> paragraph and request that the claims be interpreted with their broad functional language. Applicant is reminded that under this interpretation, the claims are anticipated or rendered obvious by three general purpose networked computers.

11. Applicant is reminded that like any amendment, the claimed language must have clear support or antecedent basis in the specification. See MPEP 608.01(n) with particular emphasis on MPEP 608.01(n) third paragraph.

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-3, 6, 7, 11, 14-18, and 36, as understood by the Examiner, are rejected under 35 U.S.C. §103(a) as being unpatentable over Briscoe et al. (US Patent No. 6,341,273) in view of either Frankel et al. (US Patent No. 7,184,988, hereafter "Frankel") or Hauser et al. (Ref U on the form PTO-892 of Paper No. 20081020, hereafter "Hauser") and further in view of Wrona et al. (USPGPub No. 2002/0128983 A1, hereafter "Wrona").

14. Regarding claim 1, Briscoe discloses all the elements of the claimed invention including:

- a. specifying a number of services within a billing unit for the service provider and the service consumer ("set number of times," C1 L63 - C2 L24);
- b. generating a sequence of codes ("the hash chain") from a start code ("secret random number") to an end code ("value at the end of the hash chain"), the number of codes in the sequence corresponding to the specified number of services within the billing unit ("set number of times," C1 L63 - C2 L24);
- c. when the service consumer requests a service of the service provider, providing to the service provider one of the codes of the sequence from which the end code can be derived ("the user communicates to the vendor the value at the end of the hash chain," C1 L63 - C2 L24);
- d. when the service provider has been provided by the service consumer with the start code, requesting payment for the billing unit from a financial entity by providing the start code to the financial entity so that the financial entity can

request the service intermediary to verify that the end code can be generated from the start code ("The vendor may collect the money owed to it at any time by communicating the last revealed hash value to the broker's settlement interface," C7 L5-9); and

e. verifying that the end code can be generated from the start code ("The vendor 5 communicates with the broker 6 to verify the validity of the end-value derived from the value received from the client 1." C4 L63-64).

15. However, although Briscoe discloses providing the end code to the service provider ("the user communicates to the vendor the value at the end of the hash chain," C2 L6-7), Briscoe fails to explicitly disclose providing the end code to the service provider via a service intermediary.

16. Both Frankel and Hauser teach selecting the start code, generating a sequence of codes (hash chain), and providing the end code to the service provider via a service intermediary (Frankel, Fig. 1 and associated text, C10 L15-21; Hauser, pgs. 2-7).

17. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Briscoe to include the start code selection, code sequence generation, and provision of the end code to the service provider via a service intermediary of Frankel or Hauser in order to achieve the predictable result of allowing for contract signing between the consumer and service provider (Frankel, C13 L38-41).

18. However, neither the combination of Briscoe/Frankel nor the combination of Briscoe/Hauser explicitly discloses that the start code is generated by the service consumer.

19. Wrona teaches a service consumer (“payer”) generating a start code (“w0, which is signed by the payer,” [0061]).

20. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify either the system of Briscoe/Hauser or Briscoe/Frankel to include the start code generation by the service consumer of Wrona in order to achieve the predictable result of non-repudiation by the service consumer (“the payment can not be repudiated,” [0061]).

21. Regarding claims 2, 3, 7, 11, 15, 16, 18, although Briscoe discloses specifying different numbers of services for billing units, the combination of Briscoe/Frankel/Wrona or Briscoe/Hauser/Wrona does not disclose doing so for different customers in order to minimize transaction costs or in order to control exposure to risk of non-payment. However, this difference lies only in the intended use or intended result of the method. As such, it cannot patentably distinguish the method from the prior art.

22. Regarding claims 6 and 17, Briscoe further discloses wherein the sequence is generated using a one-way function (“The user then uses a publicly known hash function ... The one-way nature of the hash function,” C1 L63 - C2 L24).

23. Regarding claim 12, Briscoe further discloses wherein the service intermediary (“the broker”) generates the sequence (“the broker generates a number of hash chains,” C8 L21-22).

24. Regarding claims 13 and 14, Briscoe further discloses wherein the service provider provides services requested by the service consumer (“The vendor now delivers the goods to the client,” C6 L48).

25. Claims 8-10 and 19-21, as understood by the Examiner, are rejected under 35 U.S.C. 103(a) as being unpatentable over Briscoe/Frankel/Wrona or Briscoe/Hauser/Wrona and further in view of Applicant-Admitted Prior Art.

26. Regarding claims 8-10 and 19-21 Briscoe/Frankel/Wrona or Briscoe/Hauser/Wrona disclose all the elements of the claimed invention including that the service intermediary ("the bank") resolves disputes ("The bank checks that the value is that expected for the tenth hash value generated from the relevant random secret number," Briscoe, C1 L63 - C2 L24). But both Briscoe/Frankel/Wrona and Briscoe/Hauser/Wrona fail to explicitly disclose resolving the dispute one way or the other based on the result of the hash value check. However, it is Applicant-Admitted Prior Art that it was old and well known in the art at the time of the invention for a trusted third party or intermediary to resolve disputes in favor of the party that the evidence favors in order to maintain the trust of both parties. It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Briscoe/Frankel/Wrona or Briscoe/Hauser/Wrona to include the dispute resolution based on evidence of Applicant-Admitted Prior Art in order to promote trust of and thereby use of the intermediary.

27. The Official Notice that a trusted third party or intermediary to resolves disputes in favor of the party that the evidence favors in order to maintain the trust of both parties was old and well known at the time of Applicant's invention is taken to be Applicant-Admitted Prior Art. The Official Notice was asserted by the Examiner in the Office action mailed October 24, 2008 (Paper No. 20081020, paragraph 23). Applicant did not

properly traverse this Official Notice in Applicant's next response filed February 24, 2009. Therefore, it is taken to be Applicant-Admitted Prior Art. See MPEP 2144.03.C.

***Double Patenting***

28. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

29. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

30. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

31. Claims 1-3, 6, 7, 11, 14-18, and 36 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 7,577,990. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the positively recited method steps of claims 1-3 and 6-21 are disclosed in claims 1-15 of the '990 patent.

### ***Response to Arguments***

32. Applicant's amendment with respect to the objection to claim 14 has been fully considered and it is persuasive. The objection to claim 14 is withdrawn.

33. Applicant's amendments with respect to the §112, 2<sup>nd</sup> paragraph rejections of the claims have been fully considered and they are persuasive. These §112, 2<sup>nd</sup> paragraph rejections of the previous Office action are withdrawn.

34. Applicant's arguments and amendments with respect to the §103 rejection of claims 1 and 14 have been fully considered but they are not fully persuasive.

35. Applicant argues (previous Remarks filed August 18, 2009) that Briscoe fails to disclose that the service provider provides an indication of the number of services in a billing unit to either a service consumer (as recited in claim 1) or a service intermediary (as recited in claim 14). However, this difference (**the indication of the number of services in a billing unit**) is only found in the nonfunctional descriptive material and

does not affect how the claimed invention functions (i.e., the descriptive material does not have any claimed function in the method). Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability.

36. Applicant further argues (Remarks filed January 15, 2010) that “from the service provider” (claim 1), “to the service provider” (claim 1), “to a service intermediary” (claim 14), and “from the service intermediary” (claim 14) are functional and therefore define over the prior art. However, these recitations must require a manipulative difference in the method steps recited in order to distinguish over the prior art. Applicant has provided no support for such a manipulative difference. Therefore, these recitations do not differentiate the claims from the applied prior art references.

37. See the above rejection for a detailed mapping of the previously applied prior art to the newly added limitations of claims 1 and 14.

38. Regarding the double patenting rejections of the claims, Applicant alleges that the Examiner has failed to make a *prima facie* case of double patenting. Applicant declined to further elaborate as to what aspects of a *prima facie* case of double patenting have been omitted by the Examiner. As the rejection is now nonprovisional, Applicant is invited to either file a terminal disclaimer or further argue as to what elements of a *prima facie* case for double patenting have been omitted by the Examiner.

### ***Conclusion***

39. Applicant's amendment filed January 15, 2010 necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**.

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

40. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

41. Because this application is now final, Applicant is reminded of the USPTO's after final practice as discussed in MPEP §714.12 and §714.13 and that entry of amendments after final is *not* a matter of right. "The refusal of an examiner to enter an amendment after final rejection of claims is a matter of discretion." *In re Berger*, 279 F.3d 975, 984, 61 USPQ2d 1523, 1529 (Fed. Cir. 2002) (citations omitted). Furthermore, suggestions or examples of claim language provided by the Examiner are just that--suggestions or examples--and do not constitute a formal requirement mandated by the Examiner. Unless stated otherwise by an express indication that a claim is "allowed," exemplary claim language provided by the Examiner to overcome a particular rejection or to change claim interpretation has *not* been addressed with respect to other aspects of patentability (e.g. §101 patentable subject matter, §112 1<sup>st</sup> paragraph written description and enablement, §112 2<sup>nd</sup> paragraph indefiniteness, and

§102 and §103 prior art). Therefore, any claim amendment submitted under 37 C.F.R. §1.116 that incorporates an Examiner suggestion or example or simply changes claim interpretation will nevertheless require further consideration and/or search and a patentability determination as noted above.

42. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jamie Kucab whose telephone number is 571-270-3025. The Examiner can normally be reached on Monday-Friday 9:30am-6:00pm EST.

43. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached on 571-272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

44. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JK

/ANDREW J. FISCHER/  
Supervisory Patent Examiner, Art Unit 3621